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Globalization, and Economic Crisis:  
Rethinking Contemporary Employment Dynamics  
with a Focus on the U.S. and Japan

James Heintz

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Gordon Hall  
418 North Pleasant Street  
Amherst, MA 01002

Phone: 413.545.6355  
Fax: 413.577.0261  
[peri@econs.umass.edu](mailto:peri@econs.umass.edu)  
[www.umass.edu/peri/](http://www.umass.edu/peri/)



# **The Structure of Employment, Globalization, and Economic Crises: Rethinking Contemporary Employment Dynamics with a Focus on the U.S. and Japan<sup>1</sup>**

James Heintz, Political Economy Research Institute  
University of Massachusetts, Amherst

November 2010

## **Abstract**

This paper explores the intersections between the current trajectory of globalization, changes to the structure of employment, and policies for maintaining opportunities for decent employment. There are numerous outcomes of these interactions, including higher levels of open unemployment, growth of informal employment, downward pressure on the returns to labor, and a redistribution of risk from capital to labor. Common factors have affected labor demand and labor supply in a range of countries, but specific employment outcomes are dependent on domestic institutions and structural realities. Within this broader framework, the paper examines changing patterns of employment in Japan and the U.S. in recent years, including the experience of both countries with regard to financial bubbles and subsequent crises.

JEL Codes: J21, O43, P48

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## **I. Introduction**

The global integration of economies under neoliberal policy regimes has had a fundamental impact on employment worldwide, although in distinct ways in different countries. This paper explores the intersections between the current trajectory of globalization, changes to the structure of employment, and the relationship to policies aimed at protecting decent work opportunities. In so doing, it examines global factors that affect labor demand and labor supply. Specifically, the paper argues that recent trends in the global economy have limited labor demand relative to labor supply, creating pressures that have produced structural changes in employment that compromise the welfare of working people and affects the future trajectory of economic development.

A central thesis of the paper is that common factors emerging from the neoliberal era of globalization have affected employment in a range of countries, but specific labor market outcomes are dependent on local institutional and structural realities. Within this broader framework, the paper examines changing patterns of employment in Japan and the U.S. in recent years. One feature of the recent period of globalization is the pronounced ‘financialization’ of national economies and the periodic occurrence of devastating economic crises. Both Japan and the U.S. experienced asset price bubbles and subsequent economic collapses. We gain valuable insights on how these dynamics have played themselves out in high-income economies by using Japan and the U.S. as examples

The paper is organized as follows. The next section introduces the concept of the structure of employment, which will be used as an organizing framework throughout the paper. The paper then examines broad trends affecting labor demand and labor supply in the period of neoliberal globalization and shows how a shifting balance between labor demand and supply can transform the structure of employment. After having established this analytical foundation, the process of financialization, the formation of asset price bubbles, and the subsequent crises in Japan and the U.S. are discussed. The paper concludes with a brief discussion of policy implications.

## **II. The structure of employment**

In this paper, I use the term ‘structure of employment’ to describe the relative importance of different employment arrangements in a particular country or context. For the purposes of the paper, I focus on three dimensions along which the structure of employment can be described:

- Sector of activity
- Status in employment
- Degree of ‘formality’

The use of sectoral divisions to describe patterns of employment and to relate these patterns to developmental dynamics has a long history, with the work of Kuznets and Kaldor making important early contributions. As economies grow and develop they typically undergo changes in the structure of production that have direct implications for the quality and quantity of employment opportunities. Put another way, an evolving structure of production implies an evolving structure of employment.

The classical scenario of economic development is a shift away from agriculture towards manufacturing, other types of industrial production, and services (Kaldor, 1967; Kuznets, 1971). Such changes in the productive structure will be associated with a transformation of the structure of employment. Labor moves out of agriculture and into industrial activities and services. However, changes in the sectoral shares of employment will not exactly mirror those changes in the sectoral shares of production, except under exceptional circumstances. It is quite possible for manufacturing to account for a growing share of production and a stagnant, or even shrinking share, of employment, if, for example, labor productivity in manufacturing is rising rapidly. Some countries – e.g. India and South Africa – have experienced episodes of ‘jobless growth’ in their formal manufacturing sectors in recent years.

Early research on the changes in the structure of employment indicated that industrial employment would rise with income per capita (Kuznets, 1971). Labor productivity increased more rapidly in industrial activities, due to technological advance and economies of scale. Therefore, the reallocation of labor from agriculture to industry allowed faster growth of aggregate income. These structural shifts in employment had important implications for average standards of living for the working class, particularly as any surplus labor in the agricultural sector was absorbed by growing industrial demand for labor (e.g. Ranis and Fei, 1961). Income growth provided a basis for the development of domestic markets, which not only supported industrial development, but also encouraged the growth of the service sector.

In the standard Kaldorian trajectory, industrial employment is expected to expand as individuals move out of agriculture. At some point, industrial employment reaches a peak and begins to decline, as service employment accounts for a growing share of total employment. However, contemporary movements of labor out of agricultural may be associated with little or no growth in industrial employment and a large increase in service employment. Many countries appear to ‘skip’ the step of industrial employment growth, with movements out of agriculture associated with an expansion of urban informal employment in services. Palma (2005) presents research findings which suggest that the level of per capita income at which deindustrialization begins to occur has fallen – i.e. service employment is growing more rapidly at a given level of average income than was the case in the past. It is commonplace to assume that the potential for rapid productivity improvements in service activities is limited. To the extent this is true, low average productivity keeps incomes low and affects the virtuous feedback loop in the traditional ‘economic development through industrialization’ story.

Clearly, the structure of employment will change in the course of economic growth and development. However, the direction of causation runs in both directions. The structure of employment also affects economic performance. Concentration of labor in low-productivity activities with limited opportunities for upward mobility will adversely impact economic growth and living standards. This, in turn, retards the development of domestic markets with feedback effects on the composition of employment and the scope for productivity growth. Similarly, a significant share of employment in sectors with the potential for rapid productivity growth will provide a foundation for improvements in living standards and the expansion of domestic purchasing power.

The second dimension of the structure of employment considered here is status in employment. The International Classification of Status in Employment (ICSE-93) provides a set of standard categories for classifying employment using two criteria: (1) the type and degree of economic risk, including the strength of attachment between the person and the job, and (2) the type and degree of authority/autonomy which workers have in a particular employment situation. Five primary employment status categories are identified in the ICSE-93. These categories are:

employees, employers, own-account workers, members of producers' cooperatives, and contributing family workers.

Many forms of employment can be classified within the five main groups of the ICSE-93, including some types of 'atypical' or 'non-regular' employment (Greenwood and Hoffmann, 2002). For example, in most cases it is clear that part-time workers are employees. However, the lines between these employment status categories may be blurred for other forms of non-regular employment. Examples of these intermediate categories include, but are not limited to:

- Short-term hires who sell their labor to a series of different employers;
- Brokered employment arrangements;
- Employees whose earnings rely heavily on commissions;
- Self-employed individuals with only one or two clients; and
- Forms of "disguised wage employment" which are treated as self-employment for regulatory purposes, but may have risk and authority profiles similar to wage employees.

The general concept of employment status – defined in terms of the allocation of economic risk and the allocation of authority and control – is particularly relevant for analyzing categories of non-regular employment. It is often argued that the emergence of non-regular employment involves a reallocation of economic risk and authority, with workers facing higher risks and less autonomy. Therefore, when analyzing the overall structure of employment, employment status categories should be defined so as to be able to track such changes over time.

The final aspect of the structure of employment which I emphasize for the purposes of this paper is the relationship between the prevailing employment arrangements and the system of economic governance – i.e. the broad legal and regulatory framework. The concept of informal employment is meant to capture employment relationships that are not governed by formal economic regulations or basic social protections. Because such employment falls, either wholly or partially, outside of the formal regulatory sphere, it tends to be more precarious, with lower earnings and higher poverty risk than employment which enjoys formal regulatory protections (Heintz, 2008; Chen et al., 2005). Therefore, the degree of formality represents an important aspect of the structure of employment. Note that the degree of formality is related to, but distinct from, the other dimension of the structure of employment I have discussed. For example, non-regular work has a higher probability of being informal, but this does not imply that atypical employment arrangements must be unprotected.

Moreover, because informal employment refers to employment which is not regulated or which does not enjoy core social protections, the relationship between the regulatory regime and the employment relationship depends on the status in employment. Specifically, distinct sets of laws govern paid employees and the self-employed. 'Labor law' typically focuses on the relationship between employers (the principal) and employees (the agent). For the self-employed, often no clear principal/agent relationship is evident, or such relationships are hidden. Self-employment is typically regulated by the laws governing enterprises, with a distinct tax code. Therefore, the laws and regulations that must be considered to determine whether employment is 'formal' or 'informal' depend on other aspects of the employment arrangement.

These three dimensions – the sector of employment, the status in employment, and the formal/informal distinction – constitute the structure of employment for the purposes of this paper. I argue that changes in the global economy and the dominant policy framework have altered the structure of employment in a way that reduced social protections (i.e. a process of

informalization), redistributed risk to workers without greater autonomy (i.e. reflecting changes in status in employment), and raised the number of employed individuals in low-paid, low-productivity sectors (e.g. service activities with low earnings).

The conceptual framework of the structure of employment can be applied to the U.S. and Japan. In both countries, the structure of employment has evolved dramatically over the years. The ways in which the structure of employment has changed are similar, although the precise timing and the details vary. Both the U.S. and Japan experienced what could be called a traditional Kaldorian path of industrialization – there was a movement of labor out of agriculture and into manufacturing, with rising standards of living.<sup>2</sup> As incomes expanded, so did demand for services and service employment. In the U.S. case, immigration also contributed to the growing labor supply in industry during industrialization. Manufacturing employment reached a peak in the U.S. at an earlier point than in the case of Japan. The peak in the U.S. occurred in the 1950s, at approximately 30 percent of total employment.<sup>3</sup> The peak in Japan occurred two decades later, in the 1970s, when manufacturing accounted for up to 34 percent of total employment (JILPT, 2010). In contrast, manufacturing employment comprised 19.5 percent of total Japanese employment in 2008 and just 8.7 percent of total U.S. employment in 2009.

The structure of employment continued to evolve in both countries from the 1980s onwards. Status in employment changed with a rise of non-regular employment. According to historical data from the Japan Bureau of Statistics, non-regular employment grew from about 15 percent of total employment in 1984 to over one third of total employment by 2009 with women constituting a large share of the workers in these jobs. Statistics that describe detailed trends in non-regular employment, other than part-time employment, are not available for the U.S. over this same time period, although research suggests that non-regular employment was expanding, particularly in the 1980s (Kalleberg, 2000). Women are disproportionately employed as part-time workers in the U.S., while non-citizens are disproportionately employed in temporary forms of employment (Carré and Heintz, 2009). With the growth of non-regular forms of employment, there were also signs of declining social protections (i.e. growing informality). In the U.S., for example, the proportion of workers covered by health insurance and receiving pension benefits from their employers declined over this period (Schmitt, 2007).<sup>4</sup> In both Japan and the U.S., union density rates fell significantly – altering the way in which many employment relationships had been governed in the past.

This brief summary shows how the structure of employment has evolved in Japan and the U.S. in recent decades. These issues are explored in greater detail later in the paper. Before doing so, it is helpful to examine changes that are occurring global and which impact the structure of employment worldwide.

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<sup>2</sup> In U.S. history, the rural-urban transition was racialized to some extent. There was a substantial migration of African-Americans from the rural south to the industrializing north – most notably from the 1920s to the 1960s.

<sup>3</sup> Industrial employment, as a share of total employment, was slightly higher during the war economy of the early 1940s.

<sup>4</sup> Schmitt (2007) also documents a decline in the share of employers who cover the entire cost of health benefits for their employees.

### **III. Labor Demand and Labor Supply: Factors Transforming the Structure of Employment.**

#### *a. Overview*

Traditional Kaldorian dynamics are often deterministic in character, with the level of industrial development determining the structure of employment. However, various structural and institutional factors, common to countries at different stages of development and operating at an international level, have impacted the structure of employment in this recent era of globalization. The following analysis identifies a number of these factors, framing them in terms of ‘labor demand’ and ‘labor supply’. Labor demand and labor supply are not discussed in terms of a traditional neoclassical labor market, in which wage adjust to clear markets, regulatory rigidities are the primary source of market imperfections, and changes to labor demand and supply are solely attributed to the decisions of individuals. Instead, I identify and discuss broad structural developments in the global economy which influence labor demand and labor supply and argue that their interaction changes the structure of employment.

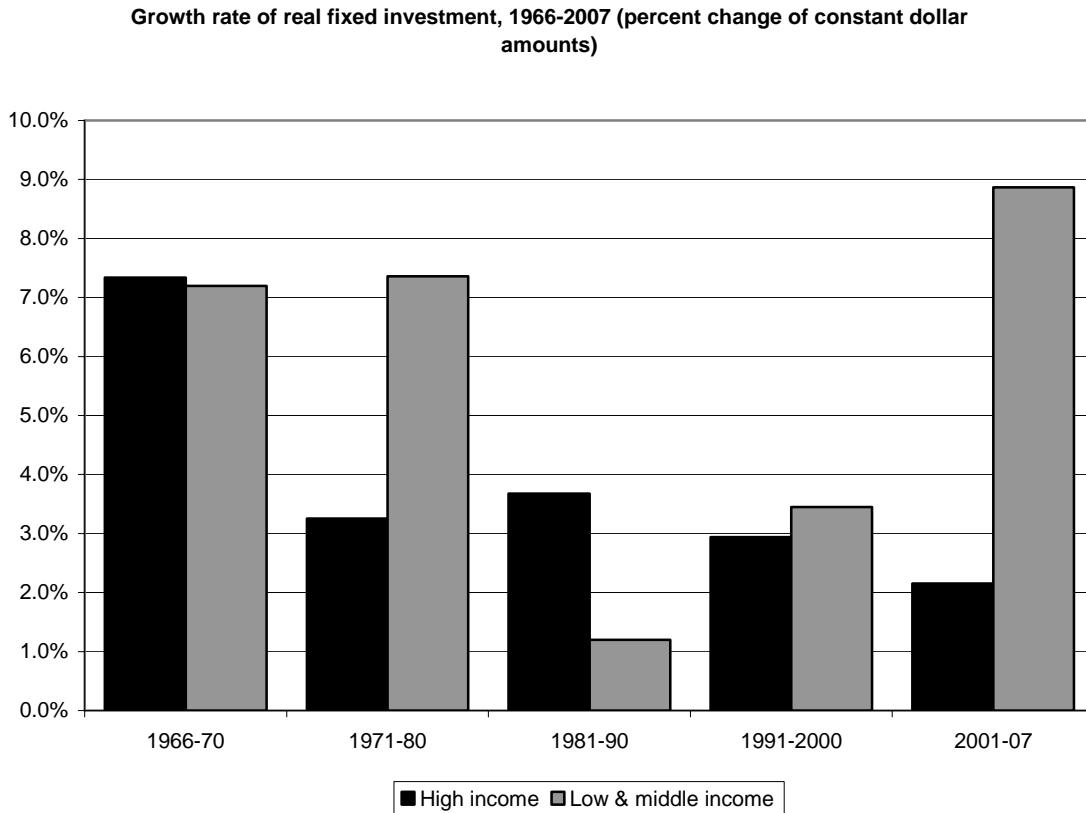
Specifically, I contend that changes associated with the recent period of globalization have limited labor demand relative to labor supply and this creates pressures leading to changes in the structure of employment. There are numerous outcomes of this imbalance between labor demand and labor supply which include higher levels of open unemployment, growth of informal employment, reduced bargaining power of workers, downward pressure on the returns to labor, and a redistribution of risk from capital to labor. At the firm level, growing competitive pressures has encouraged employers to pursue cost-saving strategies. This can take the form of employers taking advantage of atypical or non-regular employment arrangements which are often not subject to regulatory oversights (i.e. they are informal).

#### *b. Labor demand: macro developments, policy frameworks, and employer strategies.*

Neoliberal strategies have dominated the economic policy landscape since the late 1970s. These policies have tended to slow the growth of labor demand by reducing the rate of fixed capital accumulation and stressing supply-side interventions to raise productivity while de-emphasizing aggregate demand. Liberalization of capital and trade flows has increased volatility with the result that economic and financial crises have grown in frequency. As I will discuss in greater detail later in the paper, such crises can have a lasting impact on the structure of employment.

The rate of private capital accumulation declined significantly during the years in which neoliberal policies were implemented (Akyüz, 2006). Figure 1 shows the growth rate of gross fixed capital investment for high-income countries and low- and middle-income countries from 1966 to 2007. During the period 1980-2000, when the implementation of neoliberal policies was in full force, the growth rate of investment deteriorated. The decline in low- and middle-income countries is particularly noticeable. For high-income countries, the decline began in the 1970s, as the industrialized world adjusted to the shocks to oil prices. Interestingly, the growth rate of investment for low and middle income countries recovered dramatically in the last period (2001-07) of Figure 1.

Figure 1 Growth rate of real fixed investment, 1966-2006 (percent change of constant dollar amounts).



Source: World Bank, World Development Indicators.

Two factors contributed to this recovery – the rapid rate of capital accumulation in China (which pulls up the average) and the commodity price boom (which raised profit rates for exporters of natural resource based commodities). The food price, energy price, and financial crises, whose true magnitude became evident in 2007 and 2008, are not adequately reflected in Figure 1. To the extent that the commodity boom was driven by speculative activities in commodities, futures, and derivatives markets, the marked recovery in capital accumulation of the 2001-07 period may not prove to be sustainable.

Neoliberal policies affect the rate of investment through a number of channels. Monetary policies which exclusively target low rates of inflation often increase real interest rates, slow economic activity, and discourage investment in productive capital assets, relative to financial assets. Higher real interest rates attract short-term capital flows which, during sudden reversals, contribute to heightened volatility, raise unemployment, and discourage long-term investment. Inflows of capital can also lead to an appreciation of the real exchange rate, which reduces investment in tradable sectors, e.g. export producing industries (Frenkel and Taylor, 2006). In many cases, rapid trade liberalization leads to extensive import penetration and displaces domestic production. If the surge in imports is not met with a similar surge in exports, net productive capacity declines. Neoliberal policies also preclude the kind of targeted industrial policies which have supported productive investment and industrial development in other countries in the past. Industrial policies, including directed credit through financial institutions



and development banks, were instrumental in supporting rapid capital accumulation in the newly industrialized countries of East Asia (Amsden, 2001; Chang, 2003, 1994).

Neoliberal policies also lead to the downsizing of the public sectors and privatization. This reduced the relative contribution of government institutions and agencies as an important source of formal employment in many countries. Hammouya (1999) presents data that show that government employment either declined faster or grew more slowly than private employment in most countries during the 1990s. The reduction in public sector employment has been particularly noticeable in the transition economies of Eastern Europe and Central Asia. Hammouya (1999) also indicates that public employment is a particularly important source of formal jobs for women. Therefore, government downsizing would have a disproportionate impact on formal employment opportunities for women and would increase women's concentration in less formal, non-regular jobs.

As discussed above, a central feature of the most recent period of globalization is the widespread liberalization of trade and the intensification of competitive pressures. In order to maintain a competitive advantage in this environment, deliberate policy measures are frequently undertaken to keep the price of key factors of production low. For many countries, the factor of production over whose price employers have the greatest influence is labor. Therefore, employers face pressures to keep labor costs low in order to protect returns to capital.

Competitive pressures also lead to efforts to rise labor productivity in order to lower average labor costs. This can have a negative impact on labor demand. Improvements in labor productivity will negatively impact employment when demand for output does not respond vigorously to productivity increases. By definition, if the growth rate of output falls behind the growth rate in productivity, employment will decline. Numerous researchers have documented a reduction in the output elasticity of employment in many, but not all, countries over time (Ghosh, 2008; Khan, 2006; Kapsos, 2005). One explanation for this change is that, in recent years, labor productivity has grown without a proportionate increase in demand for output.

Why would aggregate demand lag behind productivity growth? Greater global integration and increased competitive pressures provide one explanation. Competition on global markets creates pressures to reduce unit labor costs – i.e. raising productivity without a proportionate increase in wages. When real living standards do not keep pace with productivity improvements, the growth in output, relative to the growth in productivity, will fall. Furthermore, these dynamics become more intense as an increasing share of output is being produced for export markets. Since the goal is not to produce for the domestic market, little is gained by insuring an adequate level of demand at home. If large numbers of countries pursue this strategy simultaneously, uncoordinated competition can result in the underdevelopment of markets at the global level. A country like the U.S. may act as 'a consumer of last resort,' in which competition among producers results in lower prices for relatively high-income consumers. Nevertheless, if demand in affluent markets is not highly responsive to reductions in unit labor costs at the point of production, the result would be a weakening of the relationship between output and employment growth.

The emphasis on improving productivity in manufacturing and industrial sectors leads to a rapid increase of service employment as a share of total employment. The scope for sustained productivity improvements in many service activities has been assumed to lag behind that of industrial production – i.e. service employment tends to increase along with service output. In addition, services tend to have relatively high income elasticities. As incomes grow, demand for services expands. Finally, many types of services are presumed to be less tradable than manufactured goods, suggesting that a growth in domestic incomes will increase demand for

domestic services. Non-regular employment arrangements tend to be more common in the service sector – such as retail stores or restaurants (e.g. see Keizer, 2008 on the Japanese case). Therefore, the shift in the sectoral composition of employment also changes the relative share of non-regular jobs.

Underlying these macro-level changes in productivity and labor demand are employer strategies adopted in response to heightened competitive pressure. Intensified competition creates pressure to cut labor costs. For example, in a recent study of non-regular employment in Japan, the need to reduce labor costs (both wage and non-wage components) was one of the most common reasons given by firms for hiring part-time or agency workers (Keizer, 2008). In addition, greater volatility and uncertainty lead employers to increase the share of non-regular and flexible employment arrangements as a strategy for managing risks – i.e. risks are transferred from employers to workers. A study by Ono and Sullivan (2010) shows that U.S. manufacturing firms that face greater volatility tend to hire more temporary workers.

Such employer strategies impact the structure of employment. The outcomes run a spectrum from a general trend towards less predictable earnings and hours of work to tiered systems of employment and social protection which combine a core workforce with a less-protected, and more flexible workforce. During times of crisis, pressures to reduce labor costs intensify, often leading to permanent changes in the nature of employment.

### *c. Global trends in labor supply*

There have also been far-reaching developments on the supply-side of labor markets around the world. Here I highlight three labor supply issues that are of particular importance: greater integration of the global work force, women's labor force participation, and labor migration (particularly with regard to urbanization and cross-border movements). The focus is deliberately on global labor supply. As economies become increasingly integrated, so do their workforces. Employment outcomes are shaped, not just by trends in the domestic labor supply, but also by changes happening globally. For example, increases in the global supply of labor will affect employment conditions in countries like Japan, where domestic labor supply has been growing more slowly than in other parts of the world, due to an aging population and declining fertility rates.

#### *i. Integration of the global workforce*

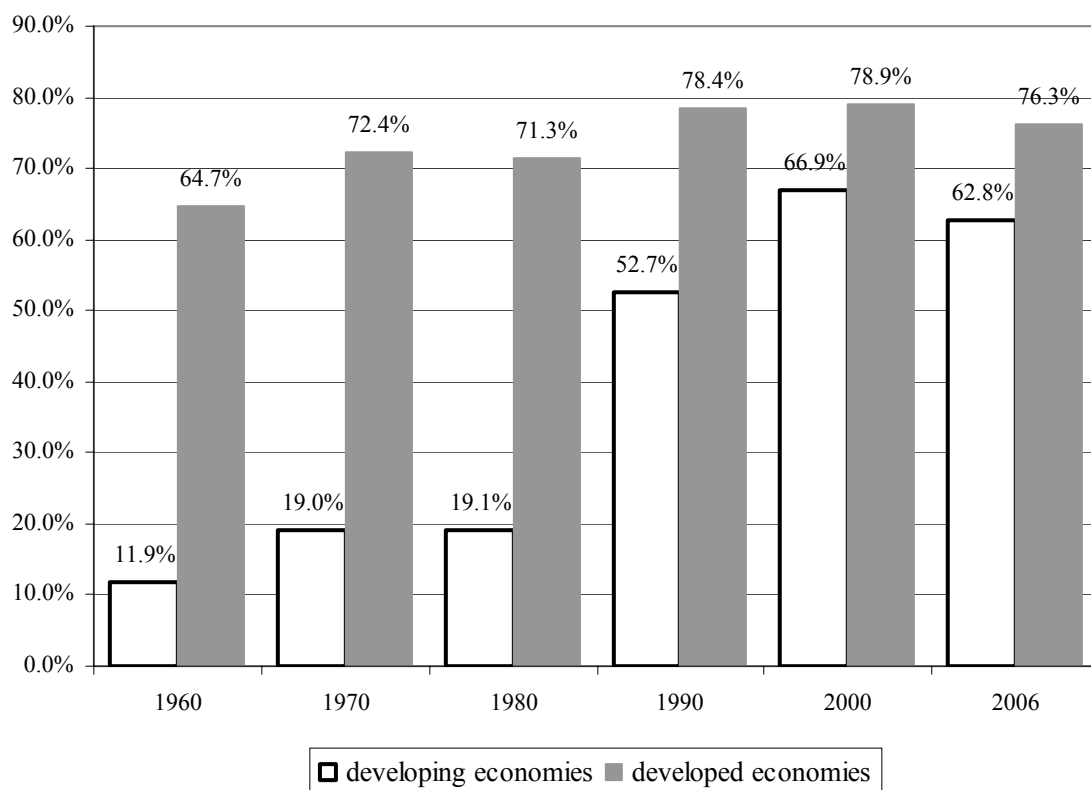
As the countries of the world re-orient their economies to produce for a more integrated, common global market, the labor forces of individual countries become increasingly consolidated into what could be considered a single global labor supply, albeit still deeply segmented. Freeman (2006) has made this point in terms of what he identifies as the doubling of the global labor pool. With the market reforms in Eastern Europe, Central Asia, and, perhaps most significantly, China, and India's adoption of more outward oriented economic policies, the number of workers engaged in production for the global market has increased enormously in recent decades. The increase in the global pool of labor has outstripped the increase in the stock of capital, making labor relatively more abundant and capital relatively scarcer (Freeman, 2006). An abundance of labor relative to capital places downward pressure on labor's terms of trade, particularly if fixed capital accumulation has been sluggish, due to the neoliberal policies.

Whether the economic and geopolitical changes which Freeman discusses has produced an actual doubling of the global pool of labor is subject to debate and qualification (i.e. substitutability and mobility are highly imperfect), but his general point remains valid: global

production for international markets has increased dramatically – effectively meaning that the workforce which is integrated, directly or indirectly, into global markets has expanded much more rapidly than the world’s population.

Figure 2 illustrates one dimension of the integration of the global workforce: the rise in the share of manufactured exports originating in developing economies, representing the new global division of labor. Not only are developing countries competing with the established manufacturing sectors of advanced industrial countries, they also are competing with each other. Improving a country’s global competitive position has emerged as a cornerstone of neoliberal growth strategies in which expanding the export sector becomes the engine of industrial development.

Figure 2. Exports of manufactured goods as a percentage of total exports, 1960-2006.



Source: UNCTAD Handbook of Statistics 2008 and UNCTAD Globstat Development and Globalization Facts and Figures ([globstat.unctad.org](http://globstat.unctad.org)).

The growth in industrial production for global markets has transformed the relationship between labor demand and potential sources of labor supply. Demand for production is no longer associated with increased demand for labor among a small set of highly industrialized countries. Today production can be sourced (and labor services purchased) from a wide range of competing countries. Labor in these countries can be said to be integrated, since one set of workers in one geographical location can easily substitute for an equivalent set of workers elsewhere. The increase in the global substitutability of labor raises the elasticity of labor demand (Rodrik, 1997). As labor demand becomes more elastic, improvements in the terms under which labor is exchanged will become more difficult to secure without risking job losses.

## ii. Women's labor force participation

Over the past several decades, one of the most significant transformations of the employment situation in a large number of countries has been a notable increase in women's labor force participation (ILO, 2008; Tzannatos, 1999; Horton, 1999). The impact of this shift on the total labor force is often ambiguous. This is because men's labor force participation rates have fallen, while women's rates have been increasing. Nevertheless, if we focus on the population of prime working age, 25 to 65 years old, ILO estimates suggest that world labor force participation rates have been increasing, largely due to women's increased participation.<sup>5</sup>

Table 1. Estimates of women's, men's, and total labor force participation rates, 1980-2010.

Region		1980	1990	2000	2010
Latin America and Caribbean	All	60.1%	62.3%	67.5%	70.5%
	Men	83.8%	84.9%	83.8%	83.0%
	Women	36.7%	40.2%	51.6%	58.4%
Sub-Saharan Africa	All	71.3%	71.7%	71.9%	72.4%
	Men	82.7%	82.9%	82.6%	81.1%
	Women	60.1%	60.8%	61.5%	63.8%
East and Southeast Asia	All	79.4%	79.9%	79.5%	77.9%
	Men	88.9%	87.1%	86.5%	84.8%
	Women	69.5%	72.2%	72.1%	70.7%
South Asia	All	63.9%	63.6%	61.7%	62.0%
	Men	88.5%	87.0%	84.6%	84.2%
	Women	37.4%	38.5%	37.2%	38.5%
Middle East/North Africa	All	53.4%	54.9%	53.0%	53.1%
	Men	80.6%	80.1%	77.5%	75.8%
	Women	25.6%	28.6%	27.5%	29.3%
Eastern Europe	All	76.4%	74.2%	67.7%	68.9%
	Men	81.5%	79.5%	73.0%	73.6%
	Women	71.7%	69.3%	62.7%	64.5%
N. America, W. Europe, Japan, Australia, New Zealand	All	61.9%	62.0%	60.5%	60.6%
	Men	75.5%	73.1%	69.7%	68.4%
	Women	49.5%	51.9%	52.1%	53.4%

Source: ILO, *Economically Active Population Estimates and Projections*, 5<sup>th</sup> edition, 2008 revision.

Table 1 presents estimates and projections of labor force participation by broad geographical regions from 1980 to 2010. The most dramatic increases are apparent in Latin America and the Caribbean. In these countries, the rapid growth in women's labor force participation pulled up the total labor force participation rate – i.e. total labor supply increased relative to the size of the working age population – and fundamentally transformed the nature of the region's labor supply. In sub-Saharan Africa and East and Southeast Asia, women's labor force participation increased, but by a relatively modest amount. However, it is important to note that in these regions women's labor force participation was relatively high on average, even at the beginning of the period shown in Table 1 (1980).

<sup>5</sup> A 1 percent increase in the labor force participation rate of women 25-64 years old would increase the global labor force by over 16 million workers, based on 2010 estimates.

In South Asia and the Middle East and North Africa regions, women's labor force participation rates also increased, but from a much lower base. Interestingly, during the market-based transition away from centrally planned economies, the countries of Eastern Europe experienced a significant drop in both men's and women's labor force participation rates. Therefore, it is not accurate to state that women's labor force participation has grown significantly in all countries around the world. What is true is that there has generally been an increase in women's labor force participation in most countries over the past three decades.

In the U.S., women's labor force participation rates increased from about 43 percent in 1970, to 51 percent in 1980, to 58 percent in 2010 (for women aged 16+). As women's labor force participation rates increased, the dominance of the 'male-breadwinner' model declined and two-income households became increasingly common. In Japan, average labor force participation rates measured across all women have not increased to the same extent. According to the Japanese Bureau of Statistics, for women aged 15+, labor force participation grew from about 45 percent in 1975 to 49 percent in 1985. It has remained at approximately 50 percent from 1986 to the present. However, these figures are misleading because of Japan's aging population and the relatively low labor force participation rates of women 65 years old or older. If we restrict our attention to the population aged 25-59, women's labor force participation grew from 52 percent in 1975 to 59 percent in 1985 to nearly 70 percent in 2009.

Women typically spend more time in unpaid household and care work. Their increased labor force participation means that women work a 'double shift' – part of their day is spent in paid work and part performing unpaid caring labor. However, given a limited amount of time available in a day, women's growing labor force participation will represent a reallocation of labor away from non-market activities and to market activities – even when participation rates in unpaid care and household work remain high. In Japan, women's labor force participation has an "M" shape – with women reducing participation rates over the ages in which they generally must care for young children (Itoh, 2000).

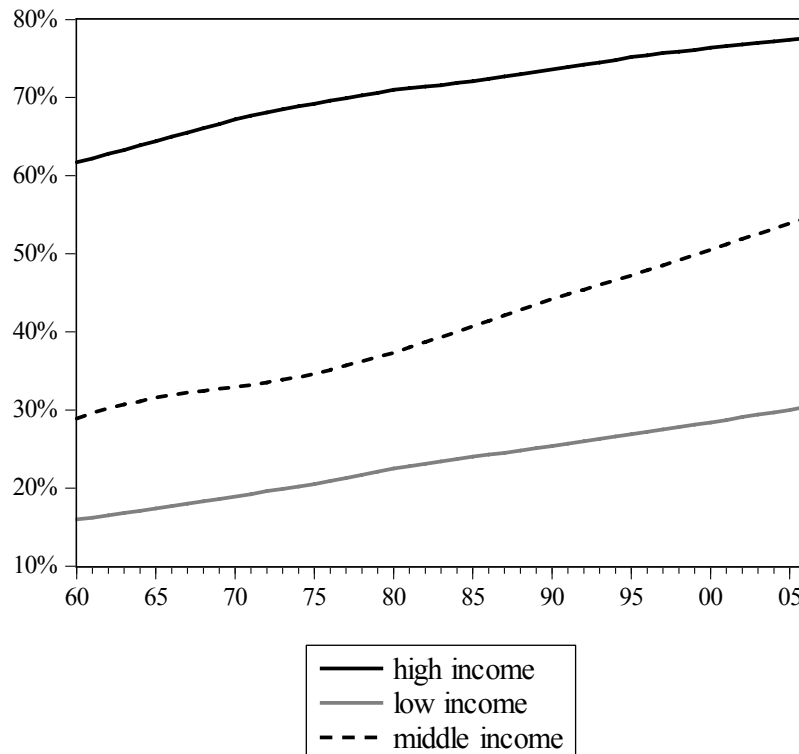
### iii. Labor migration

Two important global trends with regard to labor mobility is the on-going migration from rural to urban areas and the movement of workers across national borders. Figure 3 shows the trends in the urban population's share of total population from 1960 to 2006. The trends are disaggregated into three country groupings: high-income countries, middle-income countries, and low-income countries. The urban share of the population is highest for the high-income countries and lowest for the low-income countries. For countries like Japan and the U.S. the period of rapid urbanization of the labor supply occurred in the past. In all three country groupings, the share of the urban population has been growing – there is some indication that the growth of the share of the urban population has slowed somewhat for the high-income grouping and has accelerated for middle-income countries. Nevertheless, the growth of the global urban population is undeniable – the U.N. reports that virtually all population growth in the next 3 decades will be concentrated in urban areas (UN-HABITAT, 2010).

What this suggests is that the urban labor supply has been growing, and will likely continue to grow, faster than the total population. This raises serious questions about the associated trends in urban employment opportunities and whether urban labor demand will grow sufficiently to absorb the expanding urban work force (Heintz, 2009). Kaldorian theory predicts that industrialization will trigger rural-to-urban migration, as individuals move to take advantage of better employment opportunities. As labor demand in the industrial sector increases, so does

rural to urban migration. However, it is not uncommon to find that the growth in the urban population exceeds the growth in industrial employment opportunities. Rural-to-urban migrants who are not employed in industrial jobs will work in the service sector, in informal employment, or will become unemployed. If these patterns persist, the net result will be more informal and non-regular employment in urban areas, much of it concentrated in low-productivity services.

Figure 3. Urban share of total population (percent) by country grouping, 1960-2006.



Source: *World Development Indicators*, 2008.

Movement across international borders also affects labor supply and the global distribution of human resources. The total number of international migrants has grown steadily in recent decades, reaching nearly 200 million by 2005.<sup>6</sup> Although the total population of international migrants has been growing, the relationship between the number of migrants and the world's population has been relatively stable. Since 1990, the stock of international migrants as a percent of the world's population has remained around 3 percent. This implies that international migration has tended to increase with the size of the total population – at least since the beginning of the 1990s. The current level of international migration may seem modest – e.g. 3 percent of the total population – but it is important to bear in mind that the international migrant population is not distributed evenly across the countries of the world. In addition, countries experience uneven patterns of emigration. For countries with high levels of migration, remittances from employment can constitute a sizeable inflow of financial resources – e.g. Mexico, Ghana, and the Philippines, to name a few.

<sup>6</sup> *World Migrant Stock 2005 Revision*, UN Department of Economic and Social Affairs (UNDESA), New York.

In high-income countries, international migrants are frequently concentrated in low-paid, contingent, and unprotected forms of employment. For example, in the U.S., non-citizens account for a disproportionate share of employment as day laborers, part-time workers, and temporary hires – categories of work which tend to be significantly more precarious on average (Carré and Heintz, 2009). In some cases, migrant workers are caught up in highly exploitative, illegal employment arrangements. Despite these labor market disadvantages, remittances, financed through employment income and sent back to the country of origin, often constitute a sizeable component of household income, thereby reducing the risks of poverty.

#### **IV. Bubbles, crises, and the structure of employment: reflections on the U.S. and Japan**

##### *a. Financialization and the bubble economies of Japan and the U.S.*

The trends in labor demand and labor supply discussed above are associated with the recent period of neoliberal globalization. The imbalances between global labor supply and labor demand pose particular challenges for high-income countries like the U.S. and Japan. In both cases, the structure of employment was shaped by a traditional Kaldorian development path – a trajectory which was suddenly interrupted in the 1970s by the global oil price shocks and the subsequent neoliberal policy response. Manufacturing employment, as a share of total employment, had peaked in both countries and employment growth has increasingly occurred in services. Within the manufacturing sector, growing global integration intensified competitive pressures as manufacturing production expanded in newly industrializing countries.

These changes threatened the social accord that existed in the U.S. and Japan up until the 1980s. Industrial capital was expected to maintain productive, employment-generating investment that would ensure a steady supply of good jobs. In exchange, profitability was assured by sustaining aggregate demand while raising the productivity of labor. In the U.S., improvements in wages and living standards, at least until the 1970s, helped maintain aggregate demand in the domestic market. During the rapid growth of industrial employment in Japan, aggregate demand was supported by strong export growth. In both countries, public investments in infrastructure and education provided important complementary inputs into production which enhanced the productivity of private capital. At the heart of this social accord in Japan was the idea of life-time employment (*shūshin kōyō*). Similar social norms had evolved in the course of U.S. industrialization – the idea that the jobs created, at least for men, should earn a ‘family wage’ and would provide permanent, fulltime work.

Restructuring of global production and deindustrialization undermined this earlier social bargain. In the U.S., with the raise of international production networks, the link between domestic incomes and the wages paid in production was weakened, since an increasing share of consumer goods were imported. Aggregate demand remained important for the expanding service sector, but aggregate demand could be maintained through other means. Women’s growing labor force participation meant that two-income families increasingly became the norm. Household incomes increased, even when the average quality of employment was deteriorating, as long as the number of earners per household grew.<sup>7</sup> Growth of consumer credit also helped support aggregate demand. Moreover, the flip side of the globalization of production was a reduction in the costs of imported consumer goods. Low prices helped protect the purchasing power of wages and thereby supported key service industries – such as domestic retailers.

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<sup>7</sup> These changing norms meant that single-earner households, particularly those with children, would face growing risks of poverty. Households maintained by lone mothers are particularly vulnerable.

In Japan, the expansion of global production to a wider range of countries intensified competitive pressures and made it increasingly difficult to rely on exports as a primary source of aggregate demand. Moreover, the growth rate of manufacturing employment slowed noticeably in the 1970s, a sign that Japan's period of sustained industrial expansion was drawing to a close. This raised the possibility of future deindustrialization and significant structural change, with far-reaching implications for the quantity and quality of employment opportunities.

Given these developments, both Japan and the U.S. faced a political challenge of maintaining a core set of 'good jobs' in the face of these pressures. The fact that the segments of society that had less power – e.g. women and marginalized populations (e.g. in the case of the U.S., racial/ethnic minorities and non-citizens) - were also the people disproportionately employed in non-regular and poor quality jobs reduced the likelihood that distributive conflicts would become a serious challenge to entrenched economic interests. Nevertheless, the old social accord based on an expansion of industrial employment was clearly not sustainable, given changing global dynamics and patterns of deindustrialization.

The Kaldorian framework does not provide many insights into the course of development in economies for whom the share of labor allocated to industrial production has begun to decline. This raises important questions. Will the share of low-productivity and precarious employment continue to grow in the absence of on-going industrial expansion? Or can an allocation of resources to other, non-industrial sectors serve as a basis for sustainable improvements in the quality of employment as the allocation of productive resources to industrial production has done during periods of industrialization? This latter scenario would require that the new driver of post-industrial development contributes to capital accumulation, long-run productivity improvements, and aggregate demand. One possible candidate is the financial sector – with financial innovation and deepening becoming the new driving forces for economic development. After all, many post-industrial economies have experienced a rapid increase in the size of the financial sector in recent years. Can 'financialization' replace 'industrialization' as a foundation for providing quality employment opportunities in the future?

In both Japan and the U.S., rapid expansion of the financial sector, through the growth of financial services, new financial innovations, and the appreciation of financial asset prices, reduced pressures on the structure of employment. For a limited time, it appeared as if a reallocation of resources to the financial sector supported employment outcomes, investment, and domestic demand in the non-financial segment of the economy. In Japan, such financialization was associated with the emergence of a bubble economy in the mid 1980s and continued until 1990. In the U.S., a similar bubble economy formed in the mid-1990s and finally ended in 2008, first focused on stock markets and then shifting to include housing prices and complex derivatives. There was a brief interruption of the bubble – around 2001 – associated with the September 11<sup>th</sup> attacks in New York and Washington and a series of corporate accounting scandals. However, the bubble re-formed shortly afterwards.

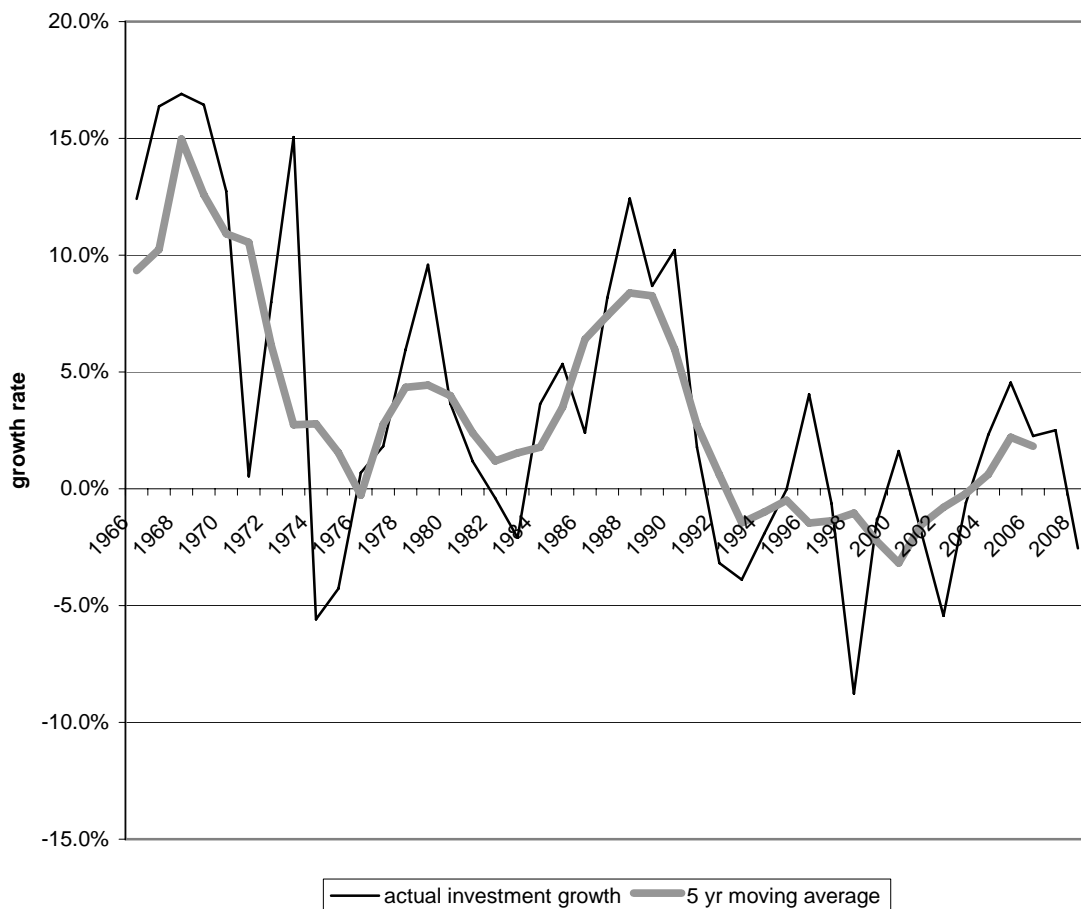
In both cases, loose monetary policy and high levels of liquidity contributed to asset price inflation which, in turn, supported the domestic economy. In Japan, the appreciation of the yen after the Plaza Accord in 1985 kept consumer price inflation at low levels, as the cost of imported inputs fell. In response, the Bank of Japan lowered interest rates and expanded liquidity (Itoh, 2000). High levels of foreign reserves allowed the Bank of Japan to simultaneously maintain a strong yen and keep interest rates low without causing consumer price inflation to accelerate. In the U.S., the globalization of production meant that low cost imports from developing countries accounted for an increasing share of consumer goods. This kept the prices of goods in tradable sectors low and contributed to low consumer price inflation. With low inflation and low



unemployment, the Federal Reserve chose to reduce interest rates. In both countries, inflationary pressures manifested themselves, not in terms of consumer prices, but rather with regard to asset prices – specifically, real estate and financial assets.

The increase in asset prices supported domestic fixed capital investment and domestic demand in both economies during the bubble years. Figure 4 shows the growth rate of real fixed investment in Japan from 1966 to 2008 – both actual growth rates and a five-year centered moving average, which mutes year-to-year fluctuations. The economic shocks of the 1970s reduced investment growth from the high rates which prevailed in the 1960s. Fixed investment growth remained at low levels until the bubble economy of the second half of the 1980s. After 1990, fixed investment growth fell to very low levels, as a consequence of the collapse of the bubble economy. Chirinko and Schaller (2001) demonstrate more rigorously that the rise in stock market prices in Japan did constitute a bubble, and that the bubble directly affected fixed capital investment.

Figure 4. Annual growth rate of real fixed capital investment, Japan, 1966-2008.

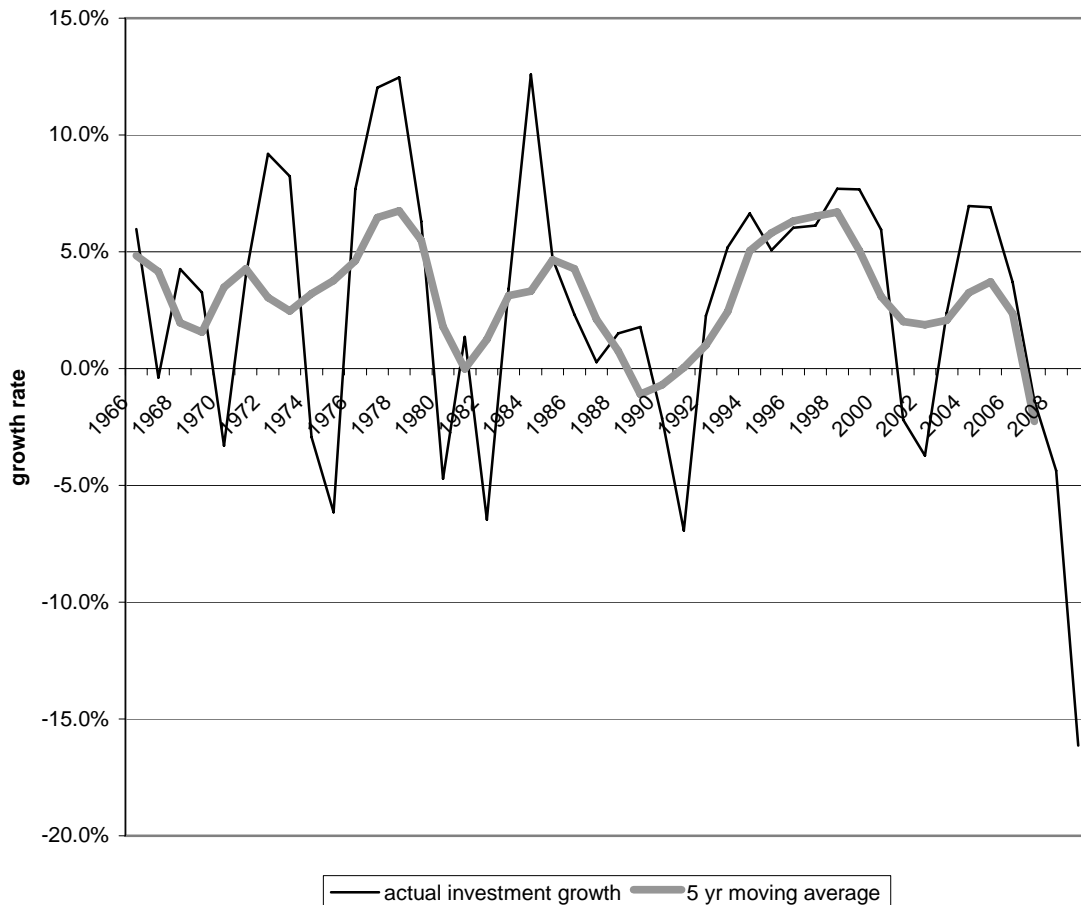


Source: IMF International Financial Statistics database.

A similar picture emerges in the case of the U.S. Figure 5 shows the growth of fixed capital investment from 1966 in terms of actual growth rates and a 5-year centered moving average. The year-to-year growth rate for the U.S. fluctuates significantly – it is easier to discern trends from the 5 year average. Investment grew moderately in the 1970s, but collapsed in the

early 1980s when the Federal Reserve raised interest rates in order to reduce consumer price inflation brought on by the oil shocks of the previous decade. This marked the shift towards neoliberal policies in the U.S. Investment recovered in the second half of the 1980s, only to collapse again with the recession of the early 1990s. With the creation of a bubble economy in the 1990s, the growth rate of investment recovered significantly with a brief interruption, as mentioned above, around 2001. Beginning in 2008, with the bursting of the bubble, investment collapsed.

Figure 5. Annual growth rate of real fixed capital investment, United States, 1966-2008.



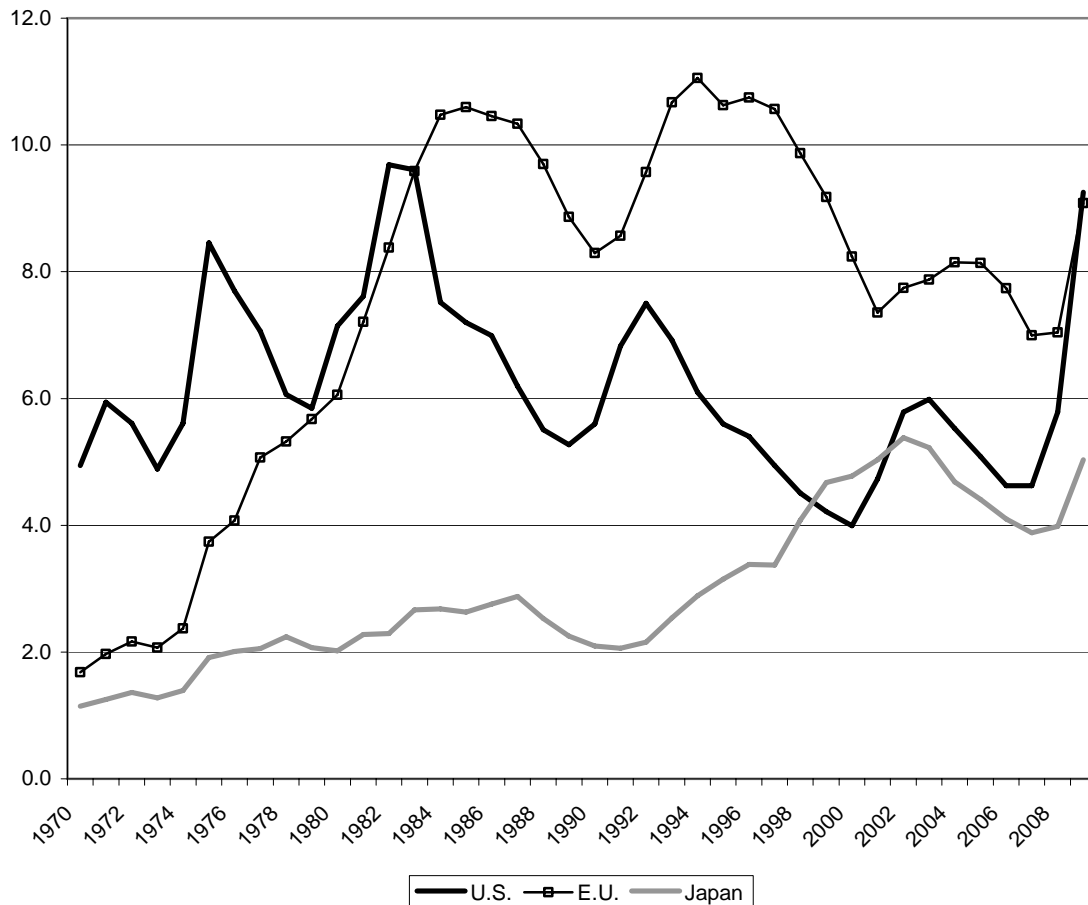
Source: IMF International Financial Statistics database.

Asset price inflation in Japan and the U.S. kept unemployment low and helped to preserve the structure of employment (i.e. helped maintain a core of good quality, relatively permanent jobs). Figure 6 shows trends in harmonized unemployment rates for Japan, the U.S., and the E.U.(15)<sup>8</sup> In the 1970s, the U.S. had the highest unemployment rate, although the unemployment rate in Japan and the average rate for the E.U.(15) were increasing. In Japan, the unemployment rate, although very low, was rising steadily until the mid-1980s. During the asset price bubble, this trend reversed itself and the unemployment rate in Japan fell. More striking is

<sup>8</sup> The European Union countries refer to the 15 countries that constituted the E.U. before the expansions in 2004 and 2007.

the fact that the bubble economy appeared to briefly reverse the process of deindustrialization. According to the Japan Bureau of Statistics, manufacturing employment actually increased during the bubble economy period. However, following the collapse, unemployment in Japan increased to historically high levels and the process of deindustrialization, temporarily hidden by the financial bubble, became obvious, with manufacturing employment dropping after the bubble burst.<sup>9</sup>

Figure 6. Unemployment rates for the United States, Japan, and the European Union (15 countries), 1980-2009.



Source: OECD.

In the U.S., the unemployment rate spiked with the contraction in monetary policy of the early 1980s. However, it reached low levels by historical standards during the bubble economy of the 1990s. With the bursting of the bubble, unemployment rose dramatically. It is interesting to compare trends in the U.S. and Japan with the European Union countries. Average unemployment

<sup>9</sup> According to the Japan Bureau of Statistics, manufacturing employment had begun to decline in the 1970s. In 1984, manufacturing employment stood at about 12 million. With the bubble economy, manufacturing employment actually increased to over 13 million by 1991. With the onset of economic crisis, the trend towards deindustrialization became clear and manufacturing employment declined steadily from 1992 onward.

in the E.U. in the 1970s was quite low. However, it increased rapidly and reached high levels in the 1980s and 1990s. This is consistent with the analysis present earlier – that structural changes in the global economy cause labor demand to fall relative to labor supply. In the case of the E.U. countries, relatively generous social welfare policies helped to mitigate the social tensions that high rates of open unemployment would have engendered elsewhere.

The idea that asset price inflation can temporarily reduce distributive conflicts is reflected in debates around the ‘natural rate of unemployment’ or ‘non-accelerating inflation rate of unemployment’ (NAIRU) in the U.S. In economic theory, the NAIRU represents an equilibrium level of unemployment consistent with stable inflation. Some have argued that the ‘natural rate of unemployment’ represents the distributive tensions that exist between capital and labor – i.e. lower unemployment increases labor’s bargaining power, bidding up wages which cause capitalist firms to raise prices in an effort to protect profits (Rowthorn, 1977). During the 1990s, unemployment fell without causing accelerating inflation. This has led some to argue that the NAIRU varies over time (Gordon, 1998). An alternative analysis of the changing relationship between consumer price inflation and unemployment in the U.S. is that financialization allowed unemployment to fall to low levels without compromising corporate profitability – i.e. it temporarily reduced distributive conflict.

The patterns of financialization observed in the U.S. and Japan were prone to economic instability, as theorized by Hyman Minsky (1986). Minsky argued that the financial sector expands endogenously, in ways that are unsustainable and prone to financial bubbles. However, bubbles invariably burst, leading to economic crises. Therefore, any solution to global pressures on the structure of employment based on speculative asset price inflation can only be temporary. The experiences of the U.S. and Japan bear this out. Given this paper’s focus on employment outcomes, it is useful to consider the impact of economic crises on the structure of employment.

#### *b. Economic crises and the structure of employment*

During times of crisis, changes to labor demand and labor supply are more extreme, often leading to rapid changes in the structure of employment. Firms typically respond to economic downturns by reducing their workforce – since hiring decisions tend to be more easily reversed than investments in fixed plant and equipment. In addition, government revenues come under pressure as tax receipts fall, leading to job losses in the public sector. The pressures to cut costs intensify during crisis periods as corporations attempt to protect profitability. With growing unemployment, economic crises also strengthen the bargaining power of management relative to that of labor. Such periods are a propitious time for employers to alter job structures and employment relationships. Plans to erode job-related protections or lower pay may be implemented during a crisis because it is an opportune time to do so, when it is least likely to be resisted by workers facing high costs of job loss.

Although temporary and non-regular workers may be the first to lose their jobs in the wake of an economic crisis, these forms of employment may also grow most rapidly during the initial period of stabilization and recovery. As discussed previously, when faced with uncertain economic prospects, employers are more likely to increase employment of temporary or part-time workers (or used brokered employment – such as that provided by temporary employment agencies) rather than hiring permanent employees. Patterns of employment that emerge as part of the recovery process will become entrenched if they prove to be profitable. Thus, an employment practice that entails generating substantial numbers of non-regular jobs can become systematized during periods of crisis and then further expand during the recovery period.

This implies that economic downturns caused by the collapse of a bubble economy often have a permanent impact on the structure of employment. The downturns associated with such crises are often retreated a cyclical phenomena. Recovery is expected to follow the crisis, with the economy eventually returning to a situation resembling its pre-crisis state. However, in terms of employment, this may not be the case. Short-term crises may have long-term consequences for the structure of employment. The continued rise in non-regular employment as a share of total employment in Japan, so that it now represents a third of all jobs, represents just such a permanent structural change.

South Korea provides another example of long-run changes to the structure of employment emerging out of a short-run crisis situation. South Korea experienced a very rapid rise of temporary and short-term employment in the years following the 1998-2000 East Asian crisis. Varied forms of fixed-term, contingent, temporary agency, and on-call workers grew from 16.6 percent of total wage and salary employment in 2001 to 28.8 percent in 2006 (Grubb, Lee, and Tergeist 2007). This change happened against a backdrop of significant total employment growth, nearly 14% over the period, but reflecting a fundamental change in the employment bargain between capital and labor.

## **V. Employment policies for decent work**

Neoliberal policies locate the solution to employment problems in the labor market. That is, open unemployment or widespread informality are blamed on excessively rigid labor market regulations or distortions introduced by collective action on the part of workers – e.g. trade unions bidding up wages above the market-clearing level. The arguments presented in this paper suggest that the solution to employment problems often lie outside of the labor market. Structural changes at the global level can generate unemployment and encourage precarious forms of employment. Asset price bubbles have an impact on labor market outcomes, and the subsequent macroeconomic collapse can permanently alter the structure of employment. Neoliberal policies limit labor demand by affecting the rate of capital accumulation and aggregate demand. Individual firms acting in the face of competitive pressures pursue uncoordinated strategies that emphasize supply-side productivity improvements, but fail to adequately support the development of markets. The end result is a decline in the growth of decent employment opportunities and the rise of less formal forms of employment.

There is a need to reverse the bias of neoliberal policy which undermines investment in capital accumulation. This implies a movement away from monetary policies which narrowly focus on inflation and instead which aim to support real growth. Appropriate financial regulations should be put into place to reduce excessive volatility which discourage long-term fixed capital investment and contribute to an excessive emphasis on short-term returns. This implies instituting alternative policies for supporting investment and avoiding situations in which increased productive investment is dependent on unsustainable speculative bubbles – i.e. ensuring that liquidity is channeled to support real economic activity. Relying on markets alone is not enough. Firms act based on short-run returns, but the decisions they make may be undesirable in the long-run. Investors that respond exclusively to short-run signals will misallocate resources – i.e. dynamic inefficiencies are present.

Not all forms of investment will support sustainable improvements in employment outcomes. This paper has argued that financialization is not an option. Because of its inherent instability and tendency towards crisis, the support it gives to the structure of employment is almost certain to be transitory. For economies experiencing deindustrialization, attempting to reverse the structural changes of recent decades is likely to result in failure. However, the

Kaldorian framework for understanding economic development can provide a guide to identifying sectors which would stabilize employment opportunities in post-industrial societies.

For example, the potential of activities within the broadly defined 'service sector' to provide a basis for future improvements in employment is not well understood. Often service employment is assumed to be a passive by-product of a particular pattern of development, with little potential for productivity growth. However, services provide important inputs for other economic activities – raising the possibility that an expansion of services could raise productivity elsewhere. A recent empirical study of the U.S. economy found that productivity improvements in services supported broader economic growth (Triplett and Bosworth, 2004). In addition, services need not be intrinsically low-productivity activities. Information technologies frequently exhibit significant economies of scale, as does knowledge production through research and development. The sectors may be more accurately classified as 'human capital intensive' rather than 'labor intensive' sectors – suggesting a shift in focus away from labor productivity towards the productivity of other factors of production, such as human capital.

Indeed, for countries with high levels of labor productivity like Japan and the U.S., a continued focus on improving labor productivity may be counter productive in a global environment where labor supply has become relatively abundant. Instead, economies should emphasize raising the productivity of relatively scarce factors of production. In the U.S. case, an obvious target for efficiency enhancements is in the use of energy and the capacity of the environment to assimilate the harmful by-products of economic activity. Capitalist development evolved to rely on relatively unfettered access to non-renewable resources, particularly carbon based energy. These factors of production will become increasingly scarce in the future. In these circumstances, investments in renewable energy and energy efficient technologies could become a new growth engine for these economies – one that would support future demand for labor.

Perhaps the single most important service activities for maintaining the long-run integrity of the economy are services which contribute to the development of human beings. These include formal health and education services, but also non-market care services provided through unpaid labor in the household – and much of which is provided by women. With women's growing labor force participation in many parts of the world, the traditional arrangement through which these services were provided is coming under pressure. A new approach to employment policy would need to propose effective and sustainable institutional arrangements for providing care in ways that would correctly value the contribution of such activities to the economy.

For developing countries with low standards of living, improvements in labor productivity that create a basis for sustainable wage increases will remain important. However, questions remain as to whether Kaldorian industrialization is the only option for economic development, given the structural changes discussed in this paper. There may be multiple approaches for improving employment opportunities. The precise mix of policies will vary from country to country. Nevertheless, infrastructure investments, increasing access to global markets, and financial reform to support investments that lead to economic development are essential. In addition, given the rapid increase in urbanization, policies need to respond to a growing employment challenge with regard to the use of urban space and planning processes.

The structure of employment will invariably evolve as economies change, grow, and develop. However, as employment arrangements evolve, so must social protection policies and normative practices. In many places, the trend has been towards informalization – a rolling back of social protections. In some cases, this involved deregulation. In others, it came about through changes in the composition of employment, with an increase in types of employment for which

social protections are weak or simply not applicable. To counter these trends, we need to rethink social protections – particularly those tied to employment – and make sure they keep up with an evolving structure of employment.

Clearly, these areas for policy intervention are very broad and the list is far from comprehensive. Nevertheless, to improve decent work opportunities globally requires a re-orientation of policies away from the neoliberal approaches which have dominated the economic landscape over the past several decades and towards a focus on employment as a central means to reducing poverty, improving human development, and creating a foundation for more egalitarian outcomes.

## References

Akyüz, Yilmaz (2006). 'From liberalization to investment and jobs: lost in translation' Working Paper No. 74. Policy Integration and Statistics Department. International Labour Office, Geneva.

Amsden, Alice (2001) *The Rise of 'The Rest': Challenges to the West from late-industrializing economies*. Oxford and New York: Oxford University Press.

Carré, Françoise and James Heintz (2009). 'The United States: different sources of precariousness in a mosaic of employment arrangements.' In L. Vosko, M. MacDonald, and I. Campbell eds. *Gender and the Contours of Precarious Employment*, London: Routledge.

Chang, Ha-Joon (2003). 'The market, the state, and institutions in economic development,' in Ha-Joon Chang, ed. *Rethinking Development Economics*, London: Anthem Press, pp. 41-60.

Chang, Ha-Joon (1994). *The Political Economy of Industrial Policy*. New York: St. Martin's Press.

Chen, M., Vanek, J., Lund, F., Heintz, J., Jhabvala, R., and Bonner, C. (2005). *Progress of the World's Women 2005: Women, Work, and Poverty*, New York: UNIFEM.

Chirinko, Robert S. and Huntley Schaller (2001). 'Business fixed investment and 'bubbles': the Japanese case' *American Economic Review* 91(3): 663-80.

Fields, Gary (1975). "Rural-urban migration, urban unemployment and underemployment, and job-search activity in LDCs." *Journal of Development Economics*, 2(2): 165-87.

Freeman, Richard (2009). 'Labor regulations, unions, and social protection in developing countries: market distortions or efficient institutions?' NBER Working Paper 14789. National Bureau of Economic Research, Cambridge, MA.

Freeman, Richard (2006). 'The great doubling: the challenge of the new global labor market.' August 2006, mimeo.

Ghosh, Jayati (2008). 'Growth, macroeconomic policies, and structural change' Background paper prepared for UNRISD flagship report on Poverty, Geneva.

Gordon, Robert (1998). 'Foundation of the Goldilocks economy: supply shocks and the time varying NAIRU.' *Brookings Papers on Economic Activity* Issues 2: 297-333.

Grubb, David, Jae-Kap Lee, and Peter Tergeist (2007). 'Addressing labour market duality in Korea' OECD Social, Employment, and Migration Working Papers, No. 61. Paris: OECD.

Hammouya, Messaoud (1999). *Statistics on Public Sector Employment: Methodology, Structures, and Trends*. Working Paper, Sectoral Activities Program, ILO Bureau of Statistics, Geneva.

Heintz, James (2008). Employment, informality and poverty: an Empirical overview of six countries with a focus on gender and race. Background paper prepared for UNRISD Flagship Report on Poverty. Geneva.

Heintz, James and Robert Pollin (2005). 'Informalization, economic growth, and the challenge of creating viable labor standards in developing countries' in N. Kudva and L. Benería, eds. *Rethinking Informalization: Poverty, Precarious Jobs, and Social Protection*. Ithaca, NY: Cornell University.

Horton, Susan (1999). 'Marginalization revisited: women's market work and pay, and economic development,' *World Development* 27(3): 571-82.

Houseman, Susan and Mashiko Osawa, Eds. 2003. *Nonstandard Work in Developed Economies: Causes and Consequences*. Kalamazoo, MI: Upjohn Institute.

ILO (2008). *Global Employment Trends for Women, March 2008*. Geneva: International Labour Office.

Itoh, Makoto. (2000). *The Japanese Economy Reconsidered*. New York: Palgrave.

JILPT (Japan Institute for Labor Policy and Training) (2010). *Japanese Working Life Profile 2009/2010 – Labor Statistics*. Tokyo.

Kaldor, Nicholas (1967). *Strategic Factors in Economic Development*. Ithaca, NY: Cornell University.

Kalleberg, Arne L. (2000). Non-standard employment relations: part-time, temporary, and contract work. *Annual Review of Sociology* 26: 341-65.

Kapsos, Steven (2005). 'The employment intensity of growth: trends and macroeconomic determinants,' Employment Strategy Papers, No. 2005/12, Employment Strategy Department, Geneva: ILO.

Keizer, Arjan B. (2008). 'Non-regular employment in Japan.' *Work, Employment, and Society* 22(3): 407-25.

Khan, Azizur Rahman (2006). 'Employment policies for poverty reduction.' In R. Islam, ed. *Fighting Poverty: the Employment-Development Link*. London: Lynne Rienner, pp.63-103.

Kuznets, Simon (1971). *Economic Growth of Nations*. Cambridge, MA: Harvard University Press.

Minsky, Hyman (1986). *Stabilizing an Unstable Economy*. New Haven, CT: Yale University Press.



National Commission on Employment in the Unorganized Sector. 2008. "India's Informal Economy: An NCEUS Perspective: Main Points and Messages." Presentation at National Council for Economic Research, New Dehli, March.

Ono, Yukako and Daniel Sullivan. (2010). 'Manufacturing plants' use of temporary workers: an analysis using census micro data' Working Paper, Federal Reserve Bank of Chicago, WP2006-24 (Revised 2010).

Palma, José Gabriel (2005). 'Four sources of 'deindustrialization' and a new concept of the 'Dutch disease'.' In J.A. Ocampo, ed. *Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability*. Washington, DC: ECLAC.

Ranis, Gustav and John C.H. Fei (1961). 'A theory of economic development.' *American Economic Review* 51(4): 533-65.

Rodrik, Dani (1997). *Has Globalization Gone Too Far?* Washington, D.C.: Institute for International Economics.

Rowthorn, Robert E. (1977). 'Conflict, inflation, and money' *Cambridge Journal of Economics* 1: 215-239.

Schmitt, John (2007). 'The good, the bad, and the ugly: job quality in the United States over the three most recent business cycles.' Research report. Center for Economic and Policy Research, Washington, DC.

Tazannatos, Zafiris (1999). 'Women and labor market changes in the global economy: growth helps, inequalities hurt, and public policy matters,' *World Development* 27(3): 551-569.

Triplett, Jack E. and Barry Bosworth (2004). *Productivity in the U.S. Services Sector: New Sources of Economic Growth*. Washington: Brookings Institution Press.

UN-HABITAT (2010). *State of the World's Cities 2010/2011. Cities for All: Bridging the Urban Divide*. Nairobi: UN-HABITAT.